INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B23K20/10 B06B3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS	CONSIDERED TO BE	RELEVANT

Further documents are listed in the continuation of box C.

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	FR 1 464 551 A (GULTON INDUSTRIES, INC) 6 January 1967 (1967-01-06) page 2, paragraphs 5,6; figures 1-5	1,2,4-6, 8,11-13
Υ	WO 02/43915 A (SCHUNK ULTRASCHALLTECHNIK GMBH ; E. STEINER ET AL) 6 June 2002 (2002-06-06) abstract; figures 5,6	1-13
Y	US 4 074 152 A (K. ASAI ET AL) 14 February 1978 (1978-02-14) column 1, 11ne 7 - column 2, line 34 column 9, lines 4-26 column 12, line 51 - column 13, line 14 column 38, line 19 - column 39, line 25; figures 3-5,14a-c,15a-d,16a-b	1-13

	<u>K</u>		
Special categories of cited documents: A' document defining the general state of the art which is not considered to be of particular relevance.	The later document published effor the International filing date or pitrify date and not in conflict with the application but obtained to understand the principle or theory underlying the obtained the principle or theory underlying the cannot be considered an overlow and the production of cannot be considered novel or cannot be considered in whether a threather steps when the document is taken alone or cannot be considered in the cannot be considered to the cannot be considered to involve an incomment of the cannot be considered to involve an order of the cannot be considered to involve an order of the cannot be considered to involve an order of the such document to combined with one or more other such document in the art.		
1º canter document but published on or after the international rifling date 1º document which in may throw doubts on priority claim(8) or which is dued to establish the publication date of another which is dued to establish the publication date of another or which is dued to establish the publication due to the content reterring to an oral disclosure, use, exhibition or other means: 1º document published prior to the International filling date but ster than the protry's date claims.			
Date of the actual completion of the international search 14 February 2005	Date of mailing of the international search report 21/02/2005		
Name and mailing address of the ISA	Authorized officer Jeggy, T		

Patent family members are listed in annex.

INTERNATIONAL SEARCH REPORT

information on patent family members

Internation No
PCT/EP2004/011904

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
FR 1464551	A	06-01-1967	NONE		
WO 0243915	A	06-06-2002	DE DE AU WO EP	20020525 U1 10127824 A1 2958302 A 0243915 A1 1339521 A1	29-03-2001 20-06-2002 11-06-2002 06-06-2002 03-09-2003
US 4074152	A	14-02-1978	JP JP JP JP JP	51078317 A 57007791 B 1114371 C 52026213 A 57007792 B 51040090 A	07-07-1976 12-02-1982 29-09-1982 26-02-1977 12-02-1982 03-04-1976